ABSTRACT OF THE DISCLSOURE

An apparatus and method for controlling transmission antenna arrays for a high-speed physical downlink shared channel (HS-PDSCH), which coexists with a dedicated physical channel (DPCH), from a first base station to a mobile station, for taking into consideration a soft handover between the mobile station and the first through K-th base stations are provided. The method comprises obtaining a first partial weight by equally considering channel characteristics of the first through K-th base stations, obtaining a second partial weight by emphasizing a channel characteristic of the first base station more than channel characteristics of the second through K-th base stations, and transmitting one of the first and second partial weights to the first through the K-th base stations as feedback information according to whether high-speed packet data is transmitted to the mobile station.